

### REMARKS

Figure 2 was objected for failing to show item C-3. The copy of Figure 2 in Applicants' file clearly shows the graph for item C-3. **A copy of Figure 2 from Applicant's file is attached herewith.**

Claims 1-19 were rejected under 35 USC 112, second paragraph. This rejection is respectfully traversed.

The language of claims 1, 10 and 11 was quite clear to begin with, but in light of the confused interpretation by the Examiner, these claims have been amended, for example please see claim 1, to clarify that the software or the hardware of the system "calculates a slope, said slope being a change in an output of the detector versus a corresponding change in either (a) a linear velocity of the disk or (b) a fly height of the head, wherein the system measures micro-waviness by increasing an RPM of the disk." Claims 10, 11 and 20 furthermore recite that "the system measures micro-waviness by increasing an RPM of the disk instead of relying on a glide avalanche as a measure of determining disk micro-waviness." Note these limitations are supported by the text on page 7, lines 19-22, of the specification.

Claims 1-5, 7-16, 18 and 19 were rejected as being obvious over Suzuki. This rejection is respectfully traversed.

Suzuki was submitted by Applicants on Information Disclosure Citation Form PTO-1449. Suzuki discloses the conventional method of determining surface micro-waviness. The conventional method is explained on page 7, second full paragraph, which states:

In Figure 2, the fly height at the lowest point in the PZT versus fly height curves is called the disk "glide avalanche" (GA). When a disk is rotated with slower and slower speed, the fly height decreases until the head starts hitting the asperities on the disk surface. This results in an avalanche in the PZT output when the fly height is lowered below the GA. Prior to this invention, disk micro-waviness was one of the several factors that influence the disk GA. This was done by rotating the disk at a relatively high speed and then *reducing* the speed while simultaneously monitoring for the PZT output. By this conventional method, one would consider that disks of examples C-1 and C-2 of Figure 2 as having less micro-waviness than that of the disk of example C-3 due to the lower values of the GA of disks of examples C-1 and C-2 than that of the disk of example C-3. [Emphasis added.]

In short, the conventional method of measuring micro-waviness of a disk was by *reducing* the disk speed while simultaneously monitoring the PZT output, and the measure of micro-waviness was the fly height when a glide avalanche occurred.

On the other hand, claims 1, 10 and 11 now clearly recite “wherein the system measures micro-waviness by *increasing* an RPM of the disk instead of relying on a glide avalanche as a measure of determining disk micro-waviness.”

The Examiner cites Figure 13 of Suzuki on page 4 of the Action to support the obviousness rejection over Suzuki. Claims 4 and 15 clearly recite that “the slope is positive” as shown in Figure 2 of the specification. On the hand, the slopes of the output versus fly height plot of Figure 13 are either negative or flat.

The Examiner acknowledges that Suzuki does not disclose a software or a hardware of the system that “calculates a slope, said slope being a change in an output of the detector versus a corresponding change in either (a) a linear velocity of the disk or (b) a fly height of the head for said change in the output of the detector, wherein the system measures micro-waviness by increasing an RPM of the disk instead of relying on a glide avalanche as a measure of determining disk micro-waviness” as recited in claim 1. Yet, the Examiner takes “Official Notice that use of software with hardware is widely known.” See page 4, lines 9-10 from the bottom of the Action. Almost anyone knows that the use of software with hardware is widely known. However, the use of software with hardware is not what claim 1 recites. Instead, claim 1 specifically recites a software or a hardware of the system that “calculates a slope, said slope being a change in an output of the detector versus a corresponding change in either (a) a linear velocity of the disk or (b) a fly height of the head for said change in the output of the detector, wherein the system measures micro-waviness by increasing an RPM of the disk instead of relying on a glide avalanche as a measure of determining disk micro-waviness.”

Furthermore, please note that there is no suggestion or motivation in Suzuki to modify Suzuki’s system of measuring micro-waviness to arrive at the claimed system that measures micro-waviness by *increasing* an RPM of the disk instead of relying on a glide avalanche as a measure of determining disk micro-waviness recited. Furthermore, there is no suggestion in Suzuki to use a software or a hardware that measures a slope of an output of the detector versus either (a) a linear

velocity of the disk or (b) a fly height of the head as recited in claim 1. Please note that "[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In short, Suzuki relates to a conventional technique of measuring surface micro-waviness of a disk and there is no suggestion to arrive at the claimed system or method of measuring micro-waviness of a disk.

Claims 6 and 17 were rejected as being anticipated by Suzuki in view of Li. This rejection is respectfully traversed.

Li does not fill the gaps in Suzuki that are stated above. Thus, even the combination of Suzuki and Li would not establish a *prima facie* of obviousness.

A Notice of Allowance is respectfully solicited.

In the unlikely event that the transmittal form is separated from this document and the Patent Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, Applicants petitions for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **146712004400**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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